

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 July 2004 (01.07.2004)

PCT

(10) International Publication Number
WO 2004/054518 A1

(51) International Patent Classification⁷: **A61K 6/00, 9/00**

(21) International Application Number:

PCT/CA2003/001943

(22) International Filing Date:

16 December 2003 (16.12.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/433,933 16 December 2002 (16.12.2002) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

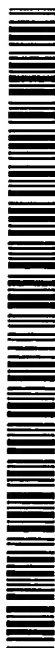
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TEMPORARY, PHARMACOLOGICALLY-INACTIVE DENTAL COATING FOR THE *IN SITU* PROTECTION OF DENTAL THERAPEUTIC AGENTS FROM SALIVA AND ABRASION FROM CHEWING

(57) **Abstract:** Topical application of a pharmacologically-inactive, inert polymeric solution to teeth affords a temporary, protective barrier for pharmacologically-active compounds that have been previously applied topically to the tooth surfaces for caries reduction. In a method of use, an aqueous dispersion polymethylmethacrylate (PMMA) and a suitable plasticizer are applied topically to the tooth surface immediately after the topical application of chlorhexidine or fluoride. The inert coating thus formed is distinct from any pharmacologically-active substance, and remains on the tooth surface until abraded by the chewing of hard foods. In a composition of matter, the solution contains ammonio methacrylate copolymer, type B USP/NF of between 20% and 35% w/w; triethyl citrate USP/NF of between 1% and 10% w/w; and purified water of between 60% and 70% w/w. The ammonio methacrylate copolymer is preferably EUDRAGIT RS 30 D brand-available from Rohm GmbH.



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